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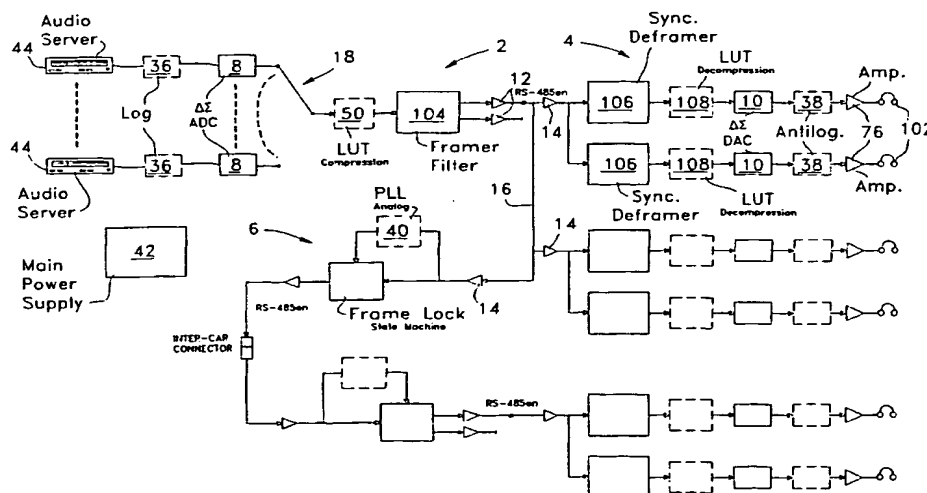
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(54) Title: SYSTEM AND METHOD FOR HIGH-SPEED APPLICATIONS OVER A SERIAL MULTI-DROP COMMUNICA-
TION NETWORK



(57) Abstract: Broadcasting of high-speed applications over a serial multi-drop communication network is achieved by time-divi-
sion multiplexing the high-speed applications to produce a data stream, framing the data stream into frames having a header of a size
lower than 32 bits and a parity bit, transmitting the frames with pre-emphasis over the serial multi-drop communication network,
receiving the frames with de-emphasis from the serial multi-drop communication network, detecting a predetermined bit pattern in
the received frames, synchronizing the received frames using an internal clock signal and an external clock signal found within the
frames following a phase comparison made after detection of the predetermined bit pattern, and de-framing the synchronized frames
into a selected one of the high-speed applications. The system implementing the above process is adapted to broadcast hi-fi audio
channels and possibly other types of data to entertainment stations connected to the communication network.